INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

May 28, 2003

TO: Interested Parties / Applicant

RE: **FOREST RIVER, INC 039-16468-00471**

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

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MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Forest River, Inc., Millersburg
201 West Elm Street
Millersburg , Indiana 46543

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-16468-00471	
Issued by: **Original signed by** Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: **May 28, 2003** Expiration Date: **May 28, 2008**

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary recreational vehicles manufacturing plant.

Authorized Individual:	Plant Manager
Source Address:	201 West Elm Street, Millersburg, Indiana 46543
Mailing Address:	P.O. Box 124, Goshen, Indiana 46527
General Source Phone:	574-533-5934
SIC Code:	3792
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following stationary emissions units and pollution control devices:

(a) Two (2) high volume low pressure (HVLP) spray guns, various aerosol spray cans and manual tube extrusion guns for coating recreational vehicles in the assembly area, with a maximum manufacturing capacity of one hundred ninety-two (192) recreational vehicles per day. This facility was constructed prior to 1980.

(b) Two (2) recreational vehicle roof and wall lamination press operations, having a maximum laminating capacity of one hundred ninety-two (192) recreational vehicles per day. This facility was constructed prior to 1980.

(c) Two (2) cabinet woodworking shops consisting of table saws, radial arm saws, and chop saws, having a maximum throughput capacity of two hundred and thirty-five (235) pounds of prefinished lumber per hour, each using baghouses as control and exhausting to stacks A and B. This facility was constructed prior to 1980.

(d) Two (2) metal inert gas (MIG) welding operations consisting of two (2) welding stations, each consuming a maximum of 0.09 pounds of electrode per hour. This facility was constructed prior to 1980.

(e) Five (5) natural gas fired space heaters with a total rated maximum capacity of 13.50 million British thermal unit (MMBtu/hr), exhausting at stacks A1, A2, A3, A4, and A5. These units were installed in 1975.

(f) Three (3) natural gas fired space-heating units (identified as EA-1) with a total rated maximum capacity of 1.80 million British thermal unit (MMBtu/hr). These units were constructed in 2003.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modification of construction permit pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an “authorized individual” as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to

thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements

C.7 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.10 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.11 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.12 Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.13 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description:

(a) Two (2) high volume low pressure (HVLP) spray guns, various aerosol spray cans and manual tube extrusion guns for coating recreational vehicles in the assembly area, with a maximum manufacturing capacity of one hundred ninety-two (192) recreational vehicles per day. This facility was constructed prior to 1980.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOC)

This source is not subject to the requirements of 326 IAC 2-7 (Part 70 Permit Program) because the potential to emit VOC from the entire source is less than one hundred (100) tons per year. Any change or modification which increases the potential emissions of VOC to equal to or greater than one hundred (100) tons per year must receive prior approval from IDEM, OAQ.

D.1.2 Hazardous Air Pollutants (HAPs)

This source is not subject to the requirements of 326 IAC 2-7 (Part 70 Permit Program) because the potential to emit a single HAP or a combination of HAPs from the entire source is less than ten (10) tons per year and twenty-five (25) tons per year, respectively. Any change or modification, which increases the potential emissions of any single HAP and/or combination of HAPs to equal to or greater than ten (10) and twenty-five (25) tons per year, respectively, must receive prior approval from IDEM, OAQ.

D.1.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2(d)]

Any change or modification which would increase actual usage to greater than five (5) gallons of coating per day for the surface coating operation shall obtain prior approval from IDEM, OAQ and shall be subject to the requirements of 326 IAC 6-3.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC and HAP emission limits established in Condition D.1.1 and D.1.2.

(1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent usage for each month;

(3) The total coating usage for each month; and

(4) The weight of VOCs and HAPs emitted for each compliance period.

(b) To document compliance with Condition D.1.3, the Permittee shall maintain daily records of the number of gallons of surface coating materials applied.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description:

(b) Two (2) recreational vehicle roof and wall lamination press operations, having a maximum laminating capacity of one hundred ninety-two (192) recreational vehicles per day. This facility was constructed prior to 1980.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Volatile Organic Compounds (VOC)

This source is not subject to the requirements of 326 IAC 2-7 (Part 70 Permit Program) because the potential to emit VOC from the entire source is less than one hundred (100) tons per year. Any change or modification which increases the potential emissions of VOC to equal to or greater than one hundred (100) tons per year must receive prior approval from IDEM, OAQ.

D.2.2 Hazardous Air Pollutants (HAPs)

This source is not subject to the requirements of 326 IAC 2-7 (Part 70 Permit Program) because the potential to emit a single HAP or a combination of HAPs from the entire source is less than ten (10) tons per year and twenty-five (25) tons per year, respectively. Any change or modification, which increases the potential emissions of any single HAP and/or combination of HAPs to equal to or greater than ten (10) and twenty-five (25) tons per year, respectively, must receive prior approval from IDEM, OAQ.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Record Keeping Requirements

(a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC and HAP emission limits established in Condition D.2.1 and D.2.2.

(1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent usage for each month;

(3) The total coating usage for each month; and

(4) The weight of VOCs and HAPs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(c) Two (2) cabinet woodworking shops consisting of table saws, radial arm saws, and chop saws, having a maximum throughput capacity of two hundred and thirty-five (235) pounds of prefinished lumber per hour, each using baghouses as control and exhausting to stacks A and B. This facility was constructed prior to 1980.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the two (2) cabinet woodworking shops shall not exceed 0.98 pounds per hour when operating at a process weight rate of 235 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.3.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.3 Particulate Control

Pursuant to 039-8971-00471, issued on December 29, 1992, and in order to comply with condition D.3.1, the baghouses for particulate control shall be in operation and control emissions from the two (2) cabinet woodworking shops at all times that the cabinet woodworking shops are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3 (e)(2)][326 IAC 2-6.1-5 (a)(2)]

D.3.4 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion.

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a violation of this permit.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(d) Two (2) metal inert gas (MIG) welding operations consisting of two (2) welding stations each consuming a maximum of 0.09 pounds of electrode per hour. This facility was constructed prior to 1980.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from any process, not already regulated by 326 IAC 6-1 or any New Source Performance Standard, which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Therefore, the welding facilities shall not exceed 0.551 pounds per hour, based on a maximum process weight of less than 100 pounds per hour.

D.4.2 Particulate [326 IAC 6-3-2]

Any change or modification which would increase the amount of rod or wire consumed to greater than six hundred and twenty-five (625) pounds of rod or wire per day for the two (2) welding operations shall obtain prior approval from IDEM, OAQ and shall be subject to the requirements of 326 IAC 6-3.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.4.3 Record Keeping Requirements

To document compliance with Condition D.4.2, the Permittee shall maintain daily records of the amount of rod and wire consumed per day for the two (2) welding operations.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(e) Five (5) natural gas fired space heaters with a total rated maximum capacity of 13.50 million British thermal unit (MMBtu/hr), exhausting at stacks A1, A2, A3, A4, and A5. These units were installed in 1975.

(f) Three (3) natural gas fired space-heating units (identified as EA-1) with a total rated maximum capacity of 1.80 million British thermal unit (MMBtu/hr). These units were constructed in 2003.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

There are no specific State and federal rules applicable to these emission units.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Forest River, Inc., Millersburg**
Address:	**201 West Elm Street**
City:	**Millersburg, Indiana 46543**
Phone #:	**574-533-5934**
MSOP #:	**039-16468-00471**

I hereby certify that Forest River, Inc., Millersburg is
- **9** still in operation.
- **9** no longer in operation.

I hereby certify that Forest River, Inc., Millersburg is
- **9** in compliance with the requirements of MSOP 039-16468-00471
- **9** not in compliance with the requirements of MSOP 039-16468-00471

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND
REASON:_____
_

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM /PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Eight (8) Space Heating Units

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 20-Nov-02

Total Heat Input Capa MMBtu/hr	Potential Throughput MMCF/yr
15.3	134.0

	Pollutant					
	PM*	PM10*	SO2	NO_x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.51	0.51	0.0	6.70	0.37	5.63

*PM and PM10 emission factors are filterable and condensible PM and PM10 combined.
**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Eight (8) Space Heating Units

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 20-Nov-02

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.407E-04	8.042E-05	5.026E-03	1.206E-01	2.278E-04

HAPs - Metals

	Lead	Cadmuim	Chromium	Manganese	Nickel
Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.351E-05	7.372E-05	9.382E-05	2.547E-05	1.407E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
VOC and Particulate
From RV Assembly Area

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 20-Nov-02

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC (tons/yr)	Potential Particulate (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Adhesive 676	6.26	79.20%	0.0%	79.2%	0.0%	21.00%	0.00900	8.000	4.96	4.96	0.36	8.57	1.56	0.00	23.61	100%
Harder 792S	9.20	76.20%	0.0%	76.2%	0.0%	24.00%	0.00078	8.000	7.01	7.01	0.04	1.05	0.19	0.02	29.21	65%
Reducer 8034S	7.50	99.40%	0.0%	99.4%	0.0%	0.60%	0.00445	8.000	7.46	7.46	0.27	6.37	1.16	0.00	1242.50	65%
ABS Cement	7.09	100.00%	0.0%	100.0%	0.0%	0.00%	0.00136	8.000	7.09	7.09	0.08	1.85	0.34	0.00	NA	100%
ABS Cleaner	6.61	100.00%	5.0%	95.0%	0.0%	0.00%	0.00039	8.000	6.28	6.28	0.02	0.47	0.09	0.00	NA	100%
Adhesive 8011	8.35	0.60%	0.0%	0.6%	0.0%	99.00%	0.03110	8.000	0.05	0.05	0.01	0.30	0.05	0.00	0.05	100%
White Caulk	7.25	7.00%	0.0%	7.0%	0.0%	100.00%	0.30000	8.000	0.51	0.51	1.22	29.23	5.33	0.00	0.51	100%
S-W Latex Paint	9.00	85.00%	0.0%	85.0%	0.0%	15.00%	0.00002	8.000	7.65	7.65	0.00	0.03	0.01	0.00	51.00	100%
Aliphatic Resin Adhesive	9.49	0.00%	0.0%	0.0%	0.0%	100.00%	0.08198	8.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
SCS1202 Silicone	8.92	5.00%	0.0%	5.0%	0.0%	95.00%	0.00468	8.000	0.45	0.45	0.02	0.40	0.07	0.00	0.47	100%
Centari Paint	10.95	60.00%	0.0%	60.0%	0.0%	40.00%	0.00250	8.000	6.57	6.57	0.13	3.15	0.58	0.13	16.43	65%
Chassis Black Paint	8.47	35.50%	0.0%	35.5%	0.0%	50.00%	0.23300	8.000	3.01	3.01	5.60	134.51	24.55	0.00	6.01	100%
Chroma Clear 760S	9.02	67.10%	0.0%	67.1%	0.0%	33.00%	0.00078	8.000	6.05	6.05	0.04	0.91	0.17	0.03	18.34	65%
Denatured Alcohol	6.70	100.00%	0.0%	100.0%	0.0%	0.00%	0.00078	8.000	6.70	6.70	0.04	1.00	0.18	0.00	NA	100%
Lacquer Thinner	7.19	100.00%	0.0%	100.0%	0.0%	0.00%	0.02500	8.000	7.19	7.19	1.44	34.51	6.30	0.00	NA	100%
S-W G2C139	7.40	75.00%	0.0%	75.0%	0.0%	25.00%	0.00117	8.000	5.55	5.55	0.05	1.25	0.23	0.00	22.20	100%
Sealer	7.40	81.37%	0.0%	81.4%	0.0%	20.00%	0.00078	8.000	6.02	6.02	0.04	0.90	0.16	0.00	30.11	100%
Mineral Spirits	6.51	100.00%	0.0%	100.0%	0.0%	0.00%	0.00389	8.000	6.51	6.51	0.20	4.86	0.89	0.00	NA	100%
MEK	6.70	100.00%	0.0%	100.0%	0.0%	0.00%	0.00389	8.000	6.70	6.70	0.21	5.00	0.91	0.00	NA	100%
Par-sil-Silicone	8.76	0.00%	0.0%	0.0%	0.0%	100.00%	0.95000	8.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
RTV Sealant 732	8.76	5.00%	0.0%	5.0%	0.0%	95.00%	0.02345	8.000	0.44	0.44	0.08	1.97	0.36	0.00	0.46	100%
Elixir Silicone	12.87	0.00%	0.0%	0.0%	0.0%	100.00%	0.00117	8.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
Spray n' Go Paint	6.09	86.10%	0.0%	86.1%	0.0%	14.00%	0.00818	8.000	5.24	5.24	0.34	8.24	1.50	0.08	37.45	65%
Spot/Panel Clear Coat	7.94	56.50%	0.0%	56.5%	0.0%	40.00%	0.00078	8.000	4.49	4.49	0.03	0.67	0.12	0.03	11.22	65%
Titeco Adhesive	6.10	68.00%	0.0%	68.0%	0.0%	34.00%	0.03111	8.000	4.15	4.15	1.03	24.78	4.52	0.74	12.20	65%
State Potential Emissions			**Add worst case coating to all solvents**								**11.25**	**270.03**	**49.28**	**1.05**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
HAPs
From RV Assembly Area

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 27-Jan-03

Material	Density (Lb/Gal)	Gal of Mat. (gal/unit)	Maximum (unit/hr)	Weight % Hexane	Weight % MIBK	Weight % Xylene	Weight % MEK	Weight % Toluene	Weight % Ethylbenzene	Weight % Methanol	Hexane Emissions (ton/yr)	MIBK Emissions (ton/yr)	Xylene Emissons (ton/yr)	MEK (ton/yr)	Toluene (tons/yr)	Ethylbenzene (tons/yr)	Methanol (tons/yr)
Adhesive 676	6.26	0.00900	8.000	40.0%							0.79	0.00	0.00	0.00	0.00	0.00	0.00
Harder 792S	9.20	0.00078	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reducer 8034S	7.50	0.00445	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
ABS Cement	7.09	0.00136	8.000				75.0%				0.00	0.00	0.00	0.25	0.00	0.00	0.00
ABS Cleaner	6.61	0.00039	8.000				95.0%				0.00	0.00	0.00	0.09	0.00	0.00	0.00
Adhesive 8011	8.35	0.03110	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
White Caulk	7.25	0.30000	8.000					7.00%			0.00	0.00	0.00	0.00	5.33	0.00	0.00
S-W Latex Paint	9.00	0.00002	8.000			16.00%		3.00%	3.00%		0.00	0.00	0.00	0.00	0.00	0.00019	0.00
Aliphatic Resin Adhesive	9.49	0.08198	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCS1202 Silicone	8.92	0.00468	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
Centari Paint	10.95	0.00250	8.000			20.00%	4.0%	11.00%			0.00	0.00	0.19	0.04	0.11	0.00	0.00
Chassis Black Paint	8.47	0.23300	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chroma Clear 760S	9.02	0.00078	8.000			17.00%	28.0%	28.00%			0.00	0.00	0.04	0.07	0.07	0.00	0.00
Denatured Alcohol	6.70	0.00078	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lacquer Thinner	7.19	0.02500	8.000		10.0%		10.0%	59.50%		9.90%	0.00	0.63	0.00	0.63	3.75	0.00	0.62
S-W G2C139	7.40	0.00117	8.000					40.00%			0.00	0.00	0.00	0.00	0.12	0.00	0.00
Sealer	7.40	0.00078	8.000		6.7%	13.62%	6.0%	30.70%			0.00	0.01	0.03	0.01	0.06	0.00	0.00
Mineral Spirits	6.51	0.00389	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEK	6.70	0.00389	8.000				100.0%				0.00	0.00	0.00	0.91	0.00	0.00	0.00
Par-sil-Silicone	8.76	0.95000	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
RTV Sealant 732	8.76	0.02345	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
Elixir Silicone	12.87	0.00117	8.000			2.00%					0.00	0.00	0.01	0.00	0.00	0.00	0.00
Spray n' Go Paint	6.09	0.00818	8.000			10.00%	10.0%	5.00%	3.00%		0.00	0.00	0.17	0.17	0.09	0.05	0.00
Spot/Panel Clear Coat	7.94	0.00078	8.000								0.00	0.00	0.00	0.00	0.00	0.00	0.00
Titeco Adhesive	6.10	0.03111	8.000	28%							1.86	0.00	0.00	0.00	0.00	0.00	0.00
										SUM	**2.65**	**0.64**	**0.45**	**2.18**	**9.53**	**0.05**	**0.62**

Individual HAP (Toluene): **9.53**
Combined Total HAPs: **16.12**

METHODOLODY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal Mat. (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations
PM/PM10 Emissions from one(1) Cabinet Woodworking Shop Operation

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 20-Nov-02

		PTE After Control	PTE Before Control
*PM Control Equipment = Baghouse		ton/yr	ton/yr
Grain Loading in grains/acf	0.004	0.511	25.5
Air Flow Rate in acf/m	3400		
Control Efficiency in %	98.0%		

* Assume all PM emission is PM10

Methodology

PM/PM10 in lbs/hr = 0.004 gr/acf * 3400 acf/min * 60 min/hr * 1 lb/7000gr
PM/PM10 in ton/yr = PM in lbs/hr * 8760 hr/yr * 1ton /2000 lb

Appendix A: Emission Calculations
VOC from RV Roof and Wall Lamination Press

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 20-Nov-02

Reaction:
15 % MDI + 85% PMDI + Water ----> 100% PMDI + Water + heat

Assume all MDI is lost without reaction:
Evaporation Rate (lb/hr) = 0.426

MDI emissions to the atmosphere in three minutes 0.0213 lb

*MDI lbs/gallon of Adhesive usage 0.0018 lb/gal

PTE

One Recreational Vehicle	=	1.71	gallon of Adhesive
8 RV/hr	=	0.0241	lbs/hr
		0.1056	ton/yr

* All VOC emitted from this process is MDI

METHODOLOGY

MDI emission in three (3) minutes = 0.426 lb VOC/hr * 0.05 hr
lbs VOC/gallon of Adhesive Usage = MDI emission in 3 minutes * 1/120 lbs spilled * 9.93 lbs spilled/ gallon
VOC lbs/hr for 8 RV = 1.71 gallon of Adhesive * 8 RV* lbs VOC/gallon of Adhesive usage

Appendix A: Emission Calculations
Welding Operation

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 20-Nov-02

Process	Number of Stations	Max. Electrode Consumption (lbs/hr)	*EMISSION FACTORS (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPs (lbs/hr)
Metal Inert Gas (MIG) Welding			PM/PM10	Mn	Ni	Cr	PM/PM10	Mn	Ni	Cr	
ER70S	2	0.18	0.0052	0.00318	0.00001	0.00001	1.87E-03	1.14E-03	3.60E-06	3.60E-06	1.15E-03

PM/PM10 (tons/yr) = 0.0082
HAPs (tons/yr) = 0.0050

*Emission Factors are from AP-42, Chapter 12.19, SCC 3-09-050

Methodology

Welding Emissions (lbs/hr) = (No. of Stations) * (Max. Electrode Consumption (lbs/hr) * Emission Factor (lbs pollutant/lb electrode)

Appendix A: Emission Calculations
Summary Emissions for Forest River, Inc. - Millersburg

Company Name: Forest River -Millersburg
Address City IN Zip: 201 West Elm Street
CP: 039-16468
Plt ID: 039-00471
Reviewer: ERG/SD
Date: 20-Nov-02

SUMMARY OF EMISSIONS IN TONS PER YEAR

	POLLUTANT							
SOURCE	**PM**	**PM_{10}**	**VOC**	**NOX**	**SO2**	**CO**	**Single HAP**	**Combined HAP**
8 Space Heaters	0.51	0.51	0.37	6.7	0.04	5.63		
Woodworking Shop	25.5	25.5						
RV Assembly Area	1.05	1.05	49.28				9.53	16.12
RV Roof and Wall Lamination			0.106				0.106	
Welding Process	0.0082	0.0082						0.005
	27.1	27.1	49.8	6.7	0.04	5.6	9.63	16.13